

State of New Mexico ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567

www.nmenv.state.nm.us





RON CURRY SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 4, 2004

Mr. R. Paul Detwiler, Acting Manager Carlsbad Field Office Department of Energy P.O. Box 3090 Carlsbad, New Mexico 88221-3090 Dr. Steven Warren, President Washington TRU Solutions, LLC P.O. Box 2078 Carlsbad, New Mexico 88221-5608

RE:

NMED COMMENTS ON WIPP RCRA GROUNDWATER QUALITY BASELINE UPDATE

REPORT, NOVEMBER 2000

WIPP HAZARDOUS WASTE FACILITY PERMIT

EPA I.D. NUMBER NM4890139088

Dear Mr. Detwiler and Dr. Warren:

On November 6, 2000, the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) received from the Department of Energy (DOE) and Westinghouse Waste Isolation Division (the Permittees), "Addendum 1, WIPP RCRA Groundwater Quality Baseline Update Report, November 2000" (report) under a cover letter dated November 3, 2000. The report was submitted as an addendum to the initial baseline, "WIPP RCRA Background Groundwater Quality Baseline Report (DOE/WIPP 98-2285)" of April 1998. NMED has also reviewed the DOE letter dated August 9, 2000 regarding "Round 10 Groundwater Re-Analysis," which provided an explanation and submittal of demonstration for exceedances to the baseline.

Permit Condition V.F requires the establishment of a baseline for the Detection Monitoring Program (**DMP**). Permit Condition V.J.4 establishes a process to demonstrate outside contamination in the event the Permittees determine a statistically significant difference for parameters or constituents at any Detection Monitoring Well (**DMW**). The Permittees submitted the referenced report because analytical results after Sampling Round 6 exhibited significant variability often exceeding the original baseline maximum values, and because the Permittees sought to increase the sampling population for statistical applications.

040606

Mr. Detwiler and Dr. Warren June 4, 2004 Page 2

After reviewing the report, NMED has the following concerns, which must be adequately addressed prior to NMED's acceptance of the report under Permit Condition V.F.5:

The Permittees provided summary statistics of general chemistry for each DMW at WIPP. NMED observes that the sample population size for each DMW appears to be large relative to the number of sampling events and is also variable between different analytes, raising concerns that the sample population and values in the report may not be consistent with the RCRA statistical guidance referenced in the permit:

- "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities" (EPA 1989)
- "Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance" (EPA, 1992)

NMED believes the Permittees must average the duplicate and regular sample values in order to obtain one value per well per sample event before following the statistical analysis guidance documents referenced above. Consequently, NMED requests that the Permittees recalculate baseline values after averaging duplicates with regular samples per well per sample event. The new statistical summaries should then be compared with the statistical summaries in the report to evaluate the differences and determine which approach most accurately represents background for each DMW.

NMED also observes that the Permittees identified "suspect data points and deletions" in Section 3.0 of the report. However, the discussion only provides a single example for why data were deleted, and Table 1 simply summarizes the data points that were deleted. The Permittees must provide the data values and rationale for each and every data point excluded from further consideration in the new baseline evaluation. Augmenting the existing table with additional columns and/or footnotes should suffice.

Finally, NMED requests tabulated values for all data (electronically, if available) per DMW in order to statistically evaluate the data and compare results with those obtained by the Permittees. The Permittees should also provide formulas used in the calculations and all relevant confidence levels and statistical test results (e.g., P-values for population distribution) so that NMED may evaluate the Permittees' sequence of steps and rationale for the statistical values.

NMED requests a formal written response to the comments/requests for information listed above. Please submit your response within thirty (30) calendar days from the date you receive this letter. NMED may consider a petition for a deadline extension, provided that a written justification and the expected submittal date are given.

Mr. Detwiler and Dr. Warren June 4, 2004 Page 3

If you have any questions regarding this matter, please contact Carl Chavez at (505) 428-2518.

Sincerely,

Steve Zappe

WIPP Project Leader

Permits Management Program

cc:

James Bearzi, Chief, HWB

John Kieling, Manager, Permits Management Program, HWB

Chuck Noble, NMED OGC

Carl Chavez, HWB

Daniela Bowman, HWB

Laurie King, EPA Region 6

Connie Walker, Trinity Engineering

WIPP File - Red '04